

***Specification***

The examiner has not checked the specification to the extent necessary to determine the presence of **all** possible minor errors (grammatical, typographical and idiomatic). Cooperation of the applicant(s) is requested in correcting any errors of which applicant(s) may become aware of in the specification, in the claims and in any future amendment(s) that applicant(s) may file.

Applicant(s) is also requested to complete the status of any copending applications referred to in the specification by their Attorney Docket Number or Application Serial Number, **if any**.

The status of the parent application(s) and/or any other application(s) cross-referenced to this application, **if any**, should be updated in a timely manner.

***Election/Restriction***

Applicant's election without traverse of Group II, claims 3-6 in the reply filed on March 25, 2009 is acknowledged.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-5 and 8-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite in the terminology stating that zeolite seed crystal is added to water. There is no antecedent basis for water in the raw material solution prior

to addition of the seed crystal. Accordingly, it is unclear as to whether the seed crystal is separately added to water, or is added into the synthesis mixture, as there is no provided step for adding the seed crystal into the raw material solution itself.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***The rejection set forth under 35 USC 103 in the previous office action is hereby withdrawn. However, the following new rejection is applicable:***

Claims 3-5 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,544,793 to Okado et al. in view of JP 61-058812 A.

The invention involves a method for making an MFI zeolite by employing zeolite seed crystals during the hydrothermal synthesis. The zeolite crystals do not exceed 1.5 microns.

Okado et al. disclose a ZSM-5 zeolite catalyst that is produced from a synthesis mixture analogous to that recited in the instantly claimed process. The examiner considers the broad ranges of the catalyst ingredients to be commensurate with those set forth in the instant claims. The examiner further considers arrival at the optimum ranges to involve no more than routine experimentation because the Okado et al. composition has the same utility as the instant composition, and therefore the effective amounts of the components would be expected to be similar, result-effective variables. See particularly the examples . The document differs from the instantly claimed method in the failure to recite a zeolite seed crystal as claimed.

It is well known in the art of zeolite synthesis to employ seed crystals to produce final compositions having crystals of consistent and desired particle size. Therefore it would have been within the skill of an artisan practicing in this field to employ a zeolite seed with a size as recited herein to produce a final composition of optimum particle or crystal size. JP 61-058812 A is relied on for the teaching that ZSM-5 seed crystals on the order of those claimed herein are known to be used during the synthesis of zeolite

materials. It would therefore have been obvious to employ such crystals as taught by the prior art. See particularly the claims and pages 3-4. Selection of the particular crystal (.i.e. MFI crystal having silica to alumina ratio within the same range as the hydrothermal synthesis mixture) would not be an unobvious modification.

### ***Response to Arguments***

Applicant's arguments filed December 16, 2009 have been fully considered but they are not persuasive.

Applicant's arguments indicate that one of ordinary skill in the art would not have been motivated to use a seed crystal such as set forth in the '812 process because the primary reference is making an alkaline earth metal containing catalyst and the seed crystal of the '812 reference does not employ such crystal and would therefore not expect consistent distribution of the alkaline earth throughout the zeolite.

This line of reasoning is not consistent because it does not appear that applicant is using an alkaline earth containing seed crystal from a review of either the claims or the specification. The examiner considers that one of ordinary skill in the art is capable of selecting crystals appropriate to production of the desired final catalyst material.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicants are advised that any evidence to be provided under 37 CFR 1.131 or 1.132 and any amendments to the claims and specification should be submitted prior to

final rejection to be considered timely. It is anticipated that the next office action will be a final rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth D. Wood whose telephone number is 571-272-1377. The examiner can normally be reached on M-F, 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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